

3.0 ALTERNATIVES

3.1 FACTORS USED IN SELECTION OF ALTERNATIVES

3.1.1 Alternatives Development and Screening Process

One of the most important aspects of the environmental review process is the identification and assessment of reasonable alternatives that have the potential for avoiding or minimizing the impacts of a proposed Project. In addition to mandating consideration of the No Project Alternative, the State CEQA Guidelines (section 15126.6(d)) emphasize the selection of a reasonable range of feasible alternatives and adequate assessment of these alternatives to allow for a comparative analysis for consideration by decision-makers.

The CEQA requires consideration of a range of alternatives to the Project or Project location that: (1) could feasibly attain most of the basic Project objectives; and (2) would avoid or substantially lessen any of the significant impacts of the proposed Project. An alternative cannot be eliminated simply because it is more costly or if it could impede the attainment of all Project objectives to some degree. However, the State CEQA Guidelines declare that an EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote or speculative. The CEQA requires that an EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed Project.

This screening analysis does not focus on relative economic factors of the alternatives (as long as they are feasible) since the State CEQA Guidelines require consideration of alternatives capable of eliminating or reducing significant environmental effects even though they may “impede to some degree the attainment of Project objectives or would be more costly.” Likewise, the question of market demand or Project need is not considered.

3.1.2 Alternatives Screening Methodology

Alternatives to the proposed Project were selected based on the input from the Applicant, CSLC staff, and the public and local jurisdictions during the NOP scoping meeting and following circulation of the NOP. The alternatives screening process consisted of three steps:

Step 1: Define the alternatives to allow comparative evaluation.

Step 2: Evaluate each alternative in consideration of one of more of the following criteria:

- The extent to which the alternative would accomplish most of the basic objectives of the Project;
- The extent to which the alternative would avoid or lessen one or more of the identified significant environmental effects of the Project;
- The potential feasibility of the alternative, taking into account site suitability, economic viability, availability of infrastructure, General Plan consistency, and consistency with other applicable plans and regulatory limitations;
- The appropriateness of the alternative in contributing to a “reasonable range” of alternatives necessary to permit a reasoned choice; and
- The requirement of the State CEQA Guidelines to consider a “No Project” alternative and to identify an “environmentally superior” alternative in addition to the “No Project” alternative (CEQA Guidelines, section 15126.6(e)).

Step 3: Determine suitability of the proposed alternative for full analysis in the EIR. If the alternative is unsuitable, eliminate it, with appropriate justification, from further consideration.

Feasible alternatives that did not clearly offer the potential to reduce significant environmental impacts and infeasible alternatives were removed from further analysis. In the final phase of the screening analysis, the environmental advantages and disadvantages of the remaining alternatives were carefully weighed with respect to potential for overall environmental advantage, technical feasibility, and consistency with project and public objectives.

If an alternative clearly does not provide any environmental advantages as compared to the proposed Project, it is eliminated from further consideration. At the screening stage, it is not possible to evaluate potential impacts of the alternatives or the proposed Project with absolute certainty. However, it is possible to identify elements of the proposed Project that are likely to be the sources of impact. An assessment of potential significant effects of the proposed Project resulted in identification of the following Class I and II impacts:

- Biological Resources: specifically, the loss of surfgrass habitat offshore of North Beach due to sand deposition;

- Hydrology and Water Quality: specifically, the potential for decreased beach width at Middle Beach and South Beach resulting from the deflection of bypassed sand away from these local beaches;
- Aesthetics/Visual Resources: specifically, the potential impacts related to decreased beach width south of the northern inlet; and
- Recreation: specifically, the potential impacts to surfing opportunity and use in the vicinity of the proposed Project resulting from changes in the bottom topography and waves, and the potential impacts to beach recreation opportunity and use caused by narrowing of beach widths south of the proposed Project.

For the screening analysis, the technical and regulatory feasibility of various potential alternatives was assessed at a general level. Specific feasibility analyses are not needed for this purpose.

3.1.3 Summary of Screening Results

Potential alternatives were reviewed against the criteria presented above. Two alternatives were eliminated based on their inability to meet the Applicant's objective and demonstrably avoid the identified significant impacts. Three remaining alternatives, found to be technically feasible and consistent with the Applicant's objectives, were reviewed to determine if the alternative had the potential to reduce the environmental impacts of the proposed Project.

Potential alternatives are listed in Table 3.1-1 according to the determination made for analysis. Those listed in the first column have been eliminated from further consideration (see rationale in Section 3.2), and those in the second column are further evaluated in Section 4.0, Environmental Analysis, of this EIR/EA.

Table 3.1-1. Summary of Alternative Screening Results	
Alternatives Eliminated from Consideration	Alternatives Evaluated in this EIR/EA
Alternative Jetty Configurations/Lengths	No Project Alternative
Increased (Annual) Lagoon Maintenance Dredging	Reduced Maintenance Dredging
	Offshore Water Intake Structure/Cessation of Lagoon Maintenance Dredging

3.2 ALTERNATIVES ELIMINATED FROM FULL EVALUATION

Two alternatives were considered but eliminated from further evaluation. The first, Alternative Jetty Configurations/Lengths, would not substantially reduce the identified significant adverse impacts and would be less well adapted to achieve the basic project objectives. The second alternative considered but eliminated from further consideration, Increased (Annual) Lagoon Maintenance Dredging, is virtually the same as the No Project Alternative, which is separately evaluated further in this EIR/EA.

3.2.1 Alternative Jetty Configurations/Lengths

The Applicant's coastal design specialists identified and evaluated the performance of several alternative jetty configurations and lengths, and determined an angled dogleg configuration would be the best-performing alternative to the proposed Project. This alternative would extend the existing jetty by about 400 feet. The first 200 feet of extended jetty would be the same as the proposed Project, and the second approximately 200 feet of new jetty would be angled toward the west at about a 70 degree angle or dogleg. According to evaluations provided by the Applicant, however, the angled dogleg jetty would not further reduce sediment entrainment into Agua Hedionda Lagoon and may actually increase entrainment during some weather conditions. As such, the angled dogleg jetty alternative would not achieve the basic project objectives. In addition, this alternative and the several configurations and lengths considered would have the same impacts as the proposed Project on biological resources, hydrology and water quality, aesthetics/visual resources, and recreation.

All of the configurations considered involved different shapes added onto the basic 200-foot extension that is proposed by the Application for evaluation in this EIR. They include an added 200-foot section curved toward the south; an added 100-foot section at right angles to the extended jetty; and a second dogleg, angled toward the north instead of the south. All of these configurations would interrupt the longshore transport of sand and have the same impacts as the proposed Project on surfgrass habitat, would increase the width of North Beach, and would reduce the widths of Middle Beach and South Beach.

3.2.2 Increased (Annual) Lagoon Maintenance Dredging

This alternative is virtually the same as the No Project Alternative, which is evaluated further in this EIR/EA. Annual dredging would eliminate the need for the proposed Project and is a potential worst-case outcome of the No Project Alternative. Annual maintenance dredging would not achieve the basic Project objective of reducing the

frequency of maintenance dredging in Agua Hedionda Lagoon to no more than once every two years. Therefore the alternative of annual maintenance dredging was not further evaluated as a stand-alone alternative.

3.3 ALTERNATIVES EVALUATED IN EIR/EA

3.3.1 No Project Alternative

Description

Under the No Project Alternative the existing jetty would not be extended and Agua Hedionda Lagoon would be dredged as frequently as necessary, potentially annually. An average of approximately 300,000 cubic yards of material was dredged annually during the five-year period, 1996 through 2000. Dredging in January 2005 is expected to increase from the 1996 through 2000 dredging volume to a total of 450,000 cubic yards of material. This compares with the average annual accumulation of approximately 150,000 cubic yards. Overdredging, dredging more than the annual volume of accumulated sediment and to greater depths than necessary, promotes increased sedimentation in the Lagoon.

Required Agency Approvals

The U.S. Army Corps of Engineers currently issues maintenance dredging permits to the Applicant as needed, generally annually or biannually. Under the No Project Alternative the Applicant would continue to obtain permits from the U.S. Army Corps of Engineers for maintenance dredging in Agua Hedionda Lagoon.

3.3.2 Reduced Maintenance Dredging Alternative

Description

Under this alternative, the extent and amount of maintenance dredging in Agua Hedionda Lagoon would be reduced to the minimum necessary to maintain a stable tidal prism and to allow sufficient circulation for cooling water, approximately 150,000 cubic yards per year or less. The dredging would be carried out annually and be limited to the volume of sand accumulated during the previous year, located along the centerline and the flood delta of the Outer Basin and would not exceed a depth of about -4 feet NVGD. The depths of dredging in Agua Hedionda Lagoon have increased in recent years, along with sedimentation rates. Overdredging can lead to increased water velocities, sand entrainment, and sedimentation rates. An average of approximately

300,000 cubic yards of material was dredged annually during the five-year period, 1996 through 2000. Dredging in January 2005 is expected to increase to a total of 450,000 cubic yards of material. Reduced maintenance dredging has the potential to avoid the impacts associated with the proposed Project, and to reduce the volume of material dredged to maintain the Lagoon for Station cooling water. Although dredging still would be performed annually, this alternative would have similar benefits to the proposed Project by reducing dredging frequency, limiting capital expenditures and maintaining sufficient levels of cooling water. Monitoring would be required as a part of this alternative to ensure the Project's objectives are achieved.

Required Agency Approvals

The U.S. Army Corps of Engineers currently issues maintenance dredging permits to the Applicant as needed, generally annually or biannually. Under this alternative, the Applicant would continue obtain annual permits from the U.S. Army Corps of Engineers for maintenance dredging in Agua Hedionda Lagoon.

3.3.3 Offshore Intake Cooling Water Structure Alternative/Cessation of Lagoon Maintenance Dredging

Description

Under this alternative the existing jetty would not be extended. Instead, the Applicant would construct a cooling water intake structure offshore from the Station. The facility would involve the construction of a 30-foot diameter, 3,000-foot-long pipeline, along with an offshore intake structure placed at an ocean depth of about 30 feet. The Applicant would no longer perform dredging in Agua Hedionda Lagoon.

Required Agency Approvals

The same regulatory approvals would be necessary as the proposed Project, namely CSLC approval to amend Lease WP871.1; California Coastal Commission approval to amend an existing Coastal Development Permit; Section 401 Water Quality Certification from the Regional Water Quality Control Board, San Diego Region; and approvals by the ACOE under Section 10 of the Rivers and Harbors Act and Section 404 of the Federal Water Pollution Control Act. Mitigation would likely be necessary to ensure that the inlet to Agua Hedionda Lagoon remains open and that current water quality is maintained.